

### REMARKS/ARGUMENTS

Claims 14-41 are active. Claim 35 has been revised for clarity. Claims 18 and 35 have been revised in light of the Examiners remarks on page 2 of the Advisory Action. New claim 41 tracks claim 27 but has been revised in light of the Examiner's remarks in the Advisory Action. No new matter has been added.

### Drawings

Replacement Figs. 1 and 2 at higher resolution for entry into SCORE were previously submitted after consultation with Joshua Chase at the Office of Data Management. These are the same drawings but are being retransmitted to the Patent Office at the highest possible scanning resolution since the Examiner indicated the resolution of the prior submission was not adequate. The Advisory Action (top of page 2) reiterates an objection to the drawings, however, the Applicants believe that this section does not take into account the drawings submitted July 1, 2010, which may not have yet been available to the Examiner. In view of these new Replacement Figures, the Applicants submit that this objection is now moot.

### Rejection—35 U.S.C. §112, second paragraph

Claims 14-26, 37 and 38 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite because dependent claim 18 “further comprises” application to a plastic surface. While the use of the phrase “further comprises” is conventional, the Applicants have adopted alternative wording in dependent claim 18 to indicate that the dispersion is applied to the surfaces named in independent claim 14, but also to a plastic surface. 37 C.F.R. §1.75(c) expressly permits a dependent claim to refer back and further limit an independent claim:

“c) One or more claims may be presented in dependent form, referring back to and further limiting another claim or claims in the same application.”

Here, claim 18 clearly further limits independent claim 14, because it requires application to a plastic surface in addition to application to “a stone, bricks, concrete or plaster surface” or “a sandwich-type plaster board, joints, paper-based wall papers, or mineral paint” surface that the method further comprise application to a plastic surface. Therefore, the language of the rejection claim is definite and this rejection cannot be maintained. Upon withdrawal of this rejection, claims 14-26, 37 and 38, which were not rejected over the prior art, will be in condition for allowance.

Rejection—35 U.S.C. §102

Claims 27-30, 35, 39, and 40 were rejected under 35 U.S.C. §102(b) as being anticipated by Maekawa, et al., JP 8-165208. This rejection cannot be sustained because as acknowledged by the Examiner on page 3 of the OA, lines 3-5 of the rejection, Maekawa does not apply the spray composition “to the surface of a sandwich-type plaster board, joints, paper-based wall papers, or mineral paint” as required by claim 27. Rather, in Maekawa the composition “is used to mildewproof a plastic pipe material”. Maekawa, paragraph [0023] refers to “product made from the plastic in a pipe”. The teachings of Maekawa relied upon by the Examiner do not disclose a composition applied to the surfaces required by independent claim 27 and thus do not disclose of all the elements of the invention.

On the other hand, independent claim 27 requires a composition that “**has been applied**” to a stone, concrete, brick, or plaster surface or to the surface of a sandwich-type plaster board, joint, paper-based wall paper, or mineral paint (emphasis added).

Secondly, this rejection cannot be sustained because the Examiner has not explained why the Maekawa composition *necessarily* contains “0.1 to 10% by weight of hydrophobic particles having a mean particle diameter of from 0.005 to 5  $\mu\text{m}$ , an irregular fine structure

ranging from 1 nm to 1,000nm, wherein elevations on the particles have an aspect ratio greater than 1” as required by the rejected claims. As set forth by MPEP 2112,

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). **"To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.**

Consequently, for each of these reasons, Maekawa cannot anticipate the present claim and this rejection cannot be sustained.

#### Rejection—35 U.S.C. §102

Claims 27, 30-36, 39 and 40 were rejected under 35 U.S.C. §102(b) as being anticipated by Keller, et al., U.S. 2002/0016433. The Examiner has not provided the necessary rationale to sustain this anticipation rejection. Here, the Examiner has not explained why the Keller composition ***necessarily*** contains “0.1 to 10% by weight of hydrophobic particles having a mean particle diameter of from 0.005 to 5 µm, an irregular fine structure ranging from 1 nm to 1,000nm, wherein elevations on the particles have an aspect ratio greater than 1”. While page 3, last line of the OA refers to a particle size of 1 micron, the Examiner has not established support in Keller for a *mean particle size range* of 0.005 to 5 µm. As set forth by MPEP 2112,

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). **"To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily**

**present in the thing described in the reference**, and that it would be so recognized by persons of ordinary skill.

Page 4, lines 5-8 of the OA presumes that aspect ratio and irregular fine structures “are inherent properties of particles” and states that these properties correlate with the surface area of the particles. However, as indicated at the top of page 12 of the specification different types of particles have different aspect ratios<sup>1</sup>. The Examiner has not explained why the prior art particles *necessarily* have an aspect ratio of  $> 1$ .

Additionally, while paragraph [0070] broadly refers to “all conventional surfaces”, it does not describe the surfaces required by claim 27 with sufficient specificity to anticipate the combination of the composition of the invention and the types of surfaces required by claim 27, nor does this reference recognize that application of the specific composition of the invention would suppress mold formation on these particular surfaces.

Since, the Examiner has not established that the prior art particles meet either the *mean* particle size range or the  $>1$  *aspect ratio* required by the invention or that the prior art discloses with sufficient specificity applying the composition of the invention to the substrates required by claim 27, this anticipation rejection cannot be sustained.

#### Rejection—35 U.S.C. §102

Claims 35 and 36 were rejected under 35 U.S.C. §102(a) or (b) as being anticipated by Nun, et al., Macromol. Symp. 187:677-682. Nun discloses a Plexiglass Lotus-Effect surface which is not the same as the surface required by claims 35 and 36. Claim 35 has been revised to expressly refer to the surfaces named in claim 27. These limitations define the term “a surface” as used in claim 35 (and in claim 36, which depends from claim 35) as one

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<sup>1</sup> The aspect ratio of the elevations of the particles is defined as the quotient of maximum height and maximum width of the elevation, specification page 12, first paragraph.

which is a “stone, concrete, brick, or plaster surface” or a “surface of a sandwich-type plaster board, joint, paper-based wall paper, or mineral paint”.

On the other hand, as indicated on page 4, lines 15-16 of the OA, “Nun et al. discloses a self-cleaning Lotus-Effect® surface on **Plexiglass®**”, see also the last paragraph on page 679 which describes a coating system “with an excellent adhesion to most of the common polymer surfaces” and Fig. 3 depicting an SEM image of self-cleaning Plexiglass®. Consequently, this rejection cannot be sustained because the Nun surface is Plexiglass and not one of the surfaces required by claims 27 or 35.

Rejection—35 U.S.C. §102

Claims 35 and 36 were rejected under 35 U.S.C. §102(f) by reference to Nun, et al., Macromol. Symp. 187:677-682 because Applicant allegedly did not invent the subject matter. As discussed above, the Nun *Plexiglass* lotus-effect surface is not the same as the lotus-effect surface of claims 35 and 36 which requires a “stone, concrete, brick, or plaster surface” or a “surface of a sandwich-type plaster board, joint, paper-based wall paper, or mineral paint”. On the other hand, as indicated on page 4, lines 15-16 of the OA, “Nun et al. discloses a self-cleaning Lotus-Effect® surface on **Plexiglass®**”. Consequently, this rejection cannot be sustained.

Conclusion

This application presents allowable subject matter and the Examiner is respectfully requested to pass it to issue. The Examiner is kindly invited to contact the undersigned should a further discussion of the issues or claims be helpful.

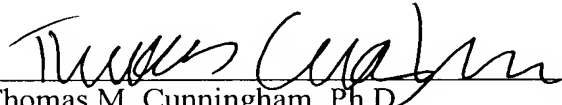
Respectfully submitted,

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